## **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF ENGINEERING SERVICES** 

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001000 Address: 333 Burma Road **Date Inspected:** 23-Nov-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Lu Jian Ping **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Weld Procedures Followed:** N/A **Electrode to specification:** Yes No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower Mock-up and OBG

### **Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

WBS Item Description Status Dwg No.

OBG Mock-up Floor Beam

The QA inspector observed welder Yin Guo Qin performing submerged arc welding operations at the joint FB-002-E-019-026.

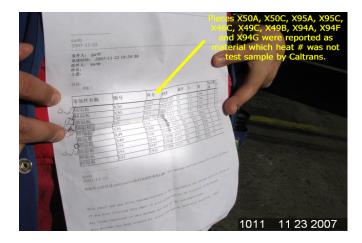


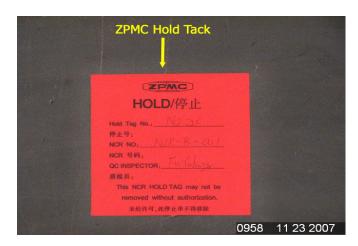
# WELDING INSPECTION REPORT

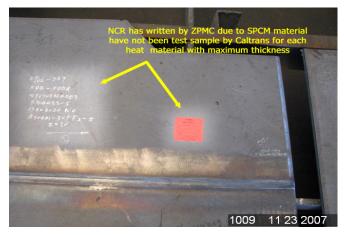
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## ZPMC internal NCR Check Testing

The QA inspector had conversation with ZPMC representative Mr. Fu Yu Hong, the QA inspector asked Mr. Fu Yu Hong the reason for the hold tags that he was attaching on the steel. Mr. Fu Yu Hong relayed that the ZPMC was issuing a internal non conformance report (NCR) because ZPMC started production activities without Caltrans check testing on the 30 mm plates designated as Seismic Performance Critical Members (SPCM) as shown on the photographs below.







#### Tower Mock-up 89 M Skin C

The QA inspector observed ZPMC to start welding with the flux cored welding (FCAW)Gantry machine at the junction of the Skin C to the longitudinal stiffeners to the mp507-1. The photograph below shows ZPMC gantry machine and the skin C and the run on tabs by the access holes.

# WELDING INSPECTION REPORT

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- Connection web plate 11A and 12 A Tower Mock-up 89M
  - The QA inspector observed ZPMC welders Wang Zhong Hua and Dai Lu performing welding operations at the web connection plate weld joint # 11A and 12A.
- OBG Mock-up deck panel 5 No fabrication activities were preformed on Bay # 1 on the OBG Mock-up deck panel on this date.
- **OBG** Dimensional Inspections 6 The QA inspector performed assembly control lines verifications at the side plate PL-109A. The QA inspector found that dimensions appeared to be in accordance with ZPMC's shop drawings.

## **Summary of Conversations:**

The QA inspector had a conversation with ZPMC representative Lay Tao. The QA inspector asked Mr. Lay Tao where ZPMC bend the 6 flanges and 3 webs designates for the shear links. Mr. Lay Tao relayed that the ZPMC bent the plates at the drum shop with a press.

The QA inspector had a conversation with ABF representative Mr. Steve Lawton. The QA inspector relayed to Mr. Steve Lawton that Caltrans would write a non conformance report (NCR) due to ZPMC cold bent (mechanical bending with a press)material designated as Seismic Performance Critical Members subassemblies MA-25 and MA-26, 3 webs and 6 flanges.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer